Accessing Block Group Data with the American Community Survey Summary File

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December 2013



Outline

- American Community Survey (ACS) basics
- Tracts and block groups
- Overview of ACS Summary File (ACS SF)
- Ways to access the ACS SF
 - FTP site
 - DataFerrett
 - Summary File Retrieval Tool
- Wrap up

What is the ACS?

- A large national survey that uses continuous measurement methods to produce detailed population and housing estimates each year
- Designed to produce critical information that was previously collected in the decennial census



American Community Survey

Content











Selected Census Geographic Concepts

Legal/Administrative Areas

- Nation
- States
- Counties
- Incorporated Places
- Minor Civil Divisions
- Congressional Districts
- State Legislative Districts
- School Districts
- Zip Code Tabulation Areas (ZCTAs)

Statistical Areas

- Regions
- Divisions
- Census Designated Places
- Census County Divisions
- Public Use Microdata Areas (PUMA)
- Census Tracts
- Block Groups

Availability of ACS Data Products

Estimated Population of Geographic Area	Type of ACS Estimates Released
65,000 or more	1-year, 3-year, 5-year
20,000 to 64,999	3-year, 5-year
Less than 20,000	5-year

Data Products Release Schedule

		Yea	r of Dat	a Releas	se		
Type of Estimate	2007	2008	2009	2010	2011	2012	2013
		Year(s	s) of Dat	a Collec	ction		
1-Year	2006	2007	2008	2009	2010	2011	2012
3-Year	NA	2005- 2007	2006- 2008	2007- 2009	2008- 2010	2009- 2011	2010- 2012
5-Year	NA	NA	NA	2005- 2009	2006- 2010	2007- 2011	2008- 2012



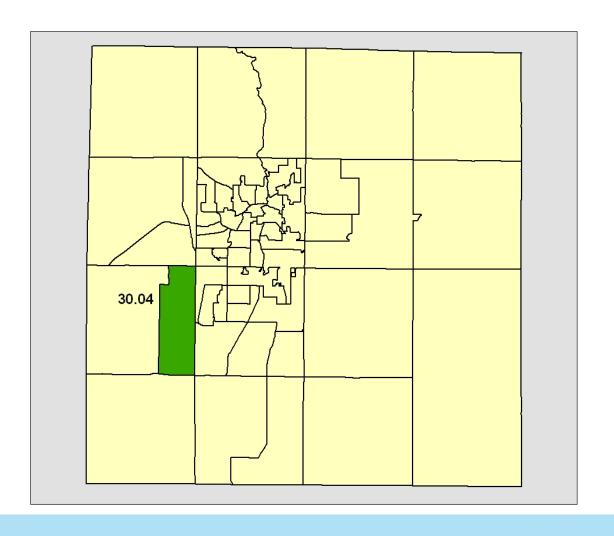
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Tracts and Block Groups

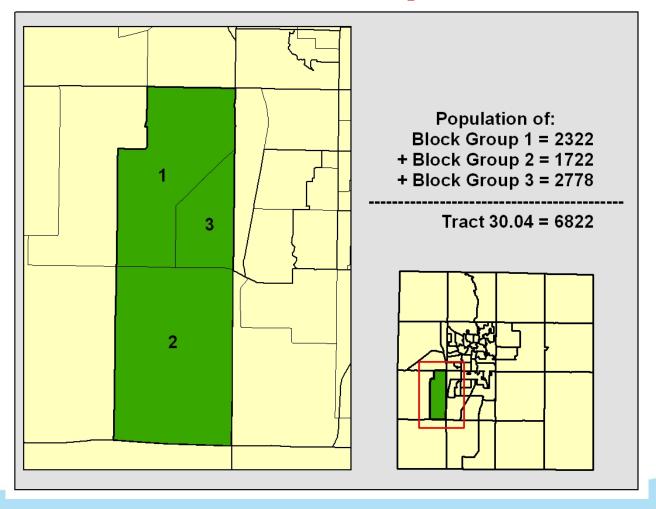
- Census tracts are small, relatively permanent statistical subdivisions of a county
- Block groups are statistical subdivisions of census tracts and are the lowest level of geography available in the ACS
- Block group estimates are available only in the ACS Summary File, not American FactFinder
- Block groups and tracts are available only in the ACS 5-year estimates

Kalamazoo County, MI - Census Tract 30.04



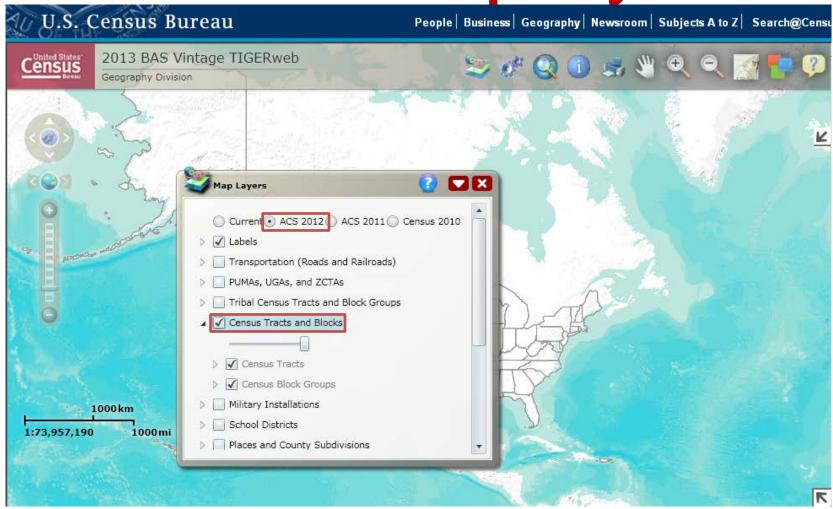


Kalamazoo County, MI - Census Tract 30.04, Block Groups 1, 2, & 3





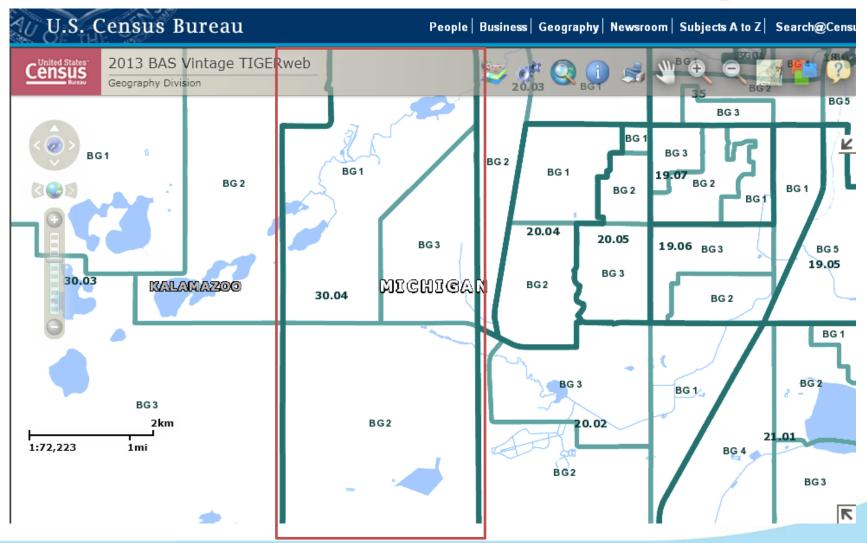
TIGERweb-Map Layers



http://tigerweb.geo.census.gov/tigerweb/



TIGERweb-Block Groups





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What is the ACS Summary File?

- Set of comma-delimited text files that contain all of the Detailed Tables
- Stored in a series of files on the FTP site
- Files contain only the data from the tables (no information such as table title, description of the rows, etc)
- Data have already been tabulated for specific geographic areas

FTP Site

	U.S. Department of Commerce Home United States								
	Census	People	Business	Geography	Data	Research News	room	Q Search	
	<u>Name</u>					Last modified	Size	Description	
٥	Parent Directory						_		
Ď	20121mi0001000.zip					11-Sep-2013 09:03	2.2K		
Ď	20121mi0002000.zip					11-Sep-2013 09:03	82 K		
D	20121mi0003000.zip					11-Sep-2013 09:03	95K		
Ď	20121mi0004000.zip					11-Sep-2013 09:03	26K		
Ď	20121mi0005000.zip					11-Sep-2013 09:03	1.6K		
Ď	20121mi0006000.zip					11-Sep-2013 09:03	18K		
Ď	20121mi0007000.zip					11-Sep-2013 09:03	30K		
Ď	20121mi0008000.zip					11-Sep-2013 09:03	23K		
D	20121mi0009000.zip					11-Sep-2013 09:03	32K		
Ď	20121mi0010000.zip					11-Sep-2013 09:03	24K		
Ď	20121mi0011000.zip					11-Sep-2013 09:03	26K		
Ď	20121mi0012000.zip					11-Sep-2013 09:03	40K		
Ď	20121mi0013000.zip					11-Sep-2013 09:03	72 K		
D	20121mi0014000.zip					11-Sep-2013 09:03	105K		

http://www2.census.gov/acs2012_1yr/summaryfile/2012_ACSSF_By_State_By_ Sequence_Table_Subset/Michigan/



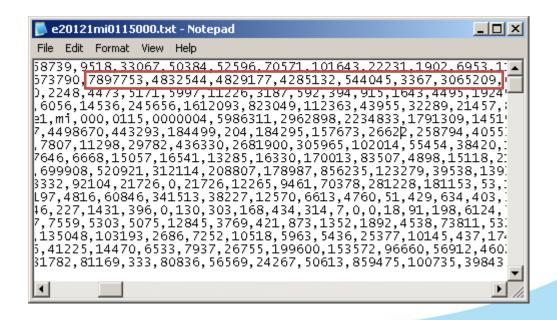
AFF vs. Summary File

B23025

EMPLOYMENT STATUS FOR THE POPULATION 16 YEARS AND OVER Universe: Population 16 years and over 2012 American Community Survey 1-Year Estimates

ŝ		Michigan					
1		Estimate	Margin of Error				
7	Total:	7,897,753	+/-4,903				
of 7	In labor force:	4,832,544	+/-17,399				
ÿ	Civilian labor force:	4,829,177	+/-17,329				
Ÿ	Employed	4,285,132	+/-17,643				
	Unemployed	544,045	+/-10,699				
	Armed Forces	3,367	+/-795				
	Not in labor force	3,065,209	+/-18,238				

Source: U.S. Census Bureau, 2012 American Community Survey



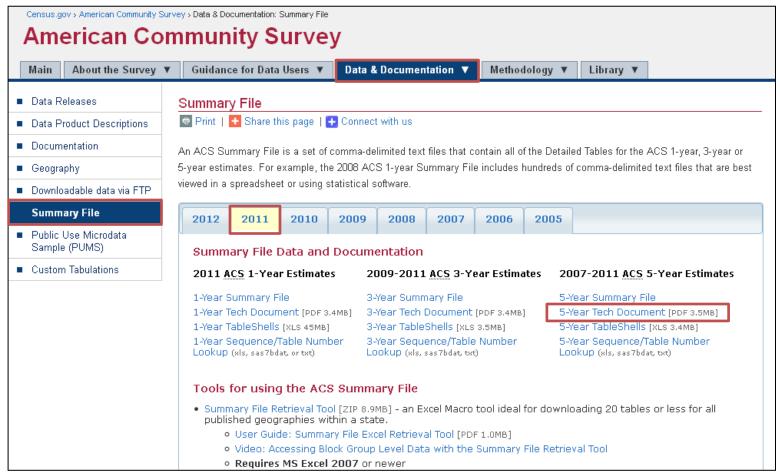
How to Use the ACS SF

1—Verify table is available at block group level

2—Use appropriate tool to access ACS SF FTP site
DataFerrett
Summary File Retrieval Tool



Summary File Page



http://www.census.gov/acs/www/data_documentation/summary_file/



Check Appendix E for Table

timber	166-169	Totale Restriction is for All Geographs es Rosept Monit Groupe	Toble Analistic for Black Groups on Summery Plac?	Flammary Fla Sepance Number	Rammary Plan Starting and Roding Positions
34 E S	Receipt Of Facel Stampellings in The Fact 12 Months By Race Of Householder (Two Orlino Races)			0011	00 CM
4111	Resets Of Facil Stangelling in The Feet O Mode by Kase Of Handwide (Mills Alexa, Not Reports O Labra)			0071	69/71
28.00	Receipt Of Feed StampaSterp in The Feet 12 Months By Race Of Householder (Reports Or Lather)			5011	7374
29.00	Receipt O' Paul Managellings in The Paul 12 Modes by Family Type By Namine O'Markers in Family in The Paul 12 Modes			5011	29/10
0.00	Media: Household Inserie In The Peol III Media (n. 2011) Inflation-Alpated Deland, By Rawell CV Peol Stempoliton in The Peol II Media			0011	19.130
26.00	The Ry Age Ry Employment Status For The Population St Years And Com-			90.0	3.09
980	Presence Of Own Children Stude 18 Years By Age Of Own Children Sales 18 Years By Englishmed Status For Fermion 20 To SKY years		*	0013	330
28.00	Wat Bale in The Paul 12 Mode by Age by Implement States for The Collect Population St Years And Day			0013	3750
W 10	Mandard Address to Instantial Stda for Sa-	-	-	2014	120

2007-2011 ACS 5-Year Summary File Technical Documentation

Table Number	Table Title	Table Restriction s for All Geographi es Except Block Groups	Table Available for Block Groups on Summary File?	Summary File Sequence Number	Summary File Starting and Ending Positions
B23025	Employment Status For The Population 16 Years And Over		Yes	0075	7-13

http://www2.census.gov/acs2011_5yr/summaryfile/ACS_2007_2011_SF_Tech_Doc.pdf



Outline

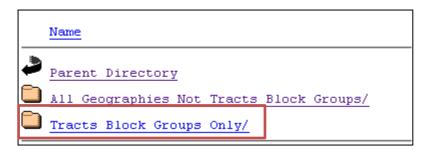
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File Transfer Protocol (FTP)

- Census Bureau's storage center for archived and current data
- Includes ACS PUMS and Summary File
- Available at http://www2.census.gov/

Summary File Organization

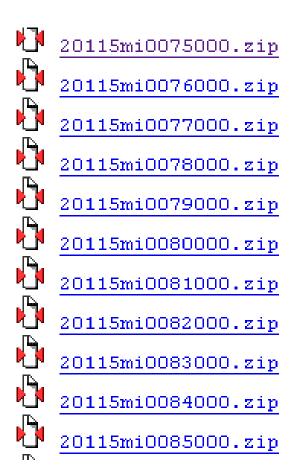
	<u>Name</u>	Last modified	Size	Description
٥	Parent Directory		_	
	2007-2011 ACSSF All In 2 Giant Files(Experienced-Users-Only)/	20-Dec-2012 13:50	-	
	2007-2011 ACSSF By State All Tables/	27-Nov-2012 13:53	_	
	2007-2011 ACSSF By State By Sequence Table Subset/	27-Nov-2012 13:53	_	
?	ACS2011 5-Year TableShells.xls	14-Nov-2012 09:37	2.2M	
	ACS 2007 2011 SF Tech Doc.pdf	30-Nov-2012 11:52	4.7M	
?	SequenceNumberTableNumberLookup.sas7bdat	17-Oct-2012 09:26	8.0M	
	Sequence Number and Table Number Lookup.txt	17-Oct-2012 09:27	1.7M	
?	Sequence Number and Table Number Lookup.xls	17-Oct-2012 09:21	2.1M	
	UserTools/	05-Dec-2012 13:32	-	



http://www2.census.gov/acs2011_5yr/summaryfile/

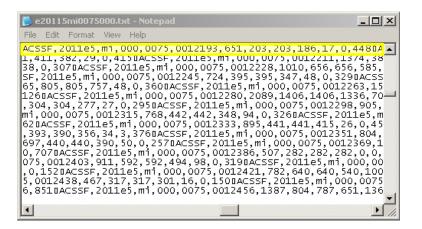


File Naming



<u>2011 5 mi 0075 000</u>.zip

- 2011=reference year
- 5=period covered
- mi=state level
- 0075=sequence number
- 000=iteration ID



Estimate file e20115mi0075000.txt

Mail: m20115mi0075000.txt - Notepad File Edit Format View Help IACSSF, 2011m5, mi, 000, 0075, 0012193, 79, 61, 61, 59, 13, 78, 651 ACSS 000,0075,0012211,275,84,84,76,25,78,2740ACSSF,2011m5,mi,000 3,78,1080ACSSF,2011m5,m1,000,0075,0012229,122,108,108,93,48 35,135,116,46,6,790ACSSF,2011m5,mi,000,0075,0012247,264,183 lm5,m1,000,0075,0012264,103,105,105,108,33,78,650ACSSF,2011 ,164,99,78,1140ACSSF,2011m5,mi,000,0075,0012282,249,177,177 💳 78,590ACSSF,2011m5,mi,000,0075,0012300,165,141,141,128,32,7 ,171,161,161,159,22,78,580ACSSF,2011m5,mi,000,0075,0012318, 2335,133,97,97,89,46,78,910ACSSF,2011m5,m1,000,0075,0012336 ACSSF,2011m5,mi,000,0075,0012354,105,81,81,81,24,78,920ACSS 075,0012372,78,78,78,78,78,78,780ACSSF,2011m5,mi,000,0075,0 |SSF,2011m5,mi,000,0075,0012390,162,142,142,141,37,78,1170A 54,119,119,109,48,78,1150ACSSF,2011m5,m1,000,0075,0012408,1 lm5,m1,000,0075,0012425,121,89,89,91,46,78,780ACSSF,2011m5, ,78,124BACSSF,2011m5,mi,000,0075,0012443,124,113,113,106,24 460.138.148.148.122.43.78.840ACSSF.2011m5.mi.000.0075.00124

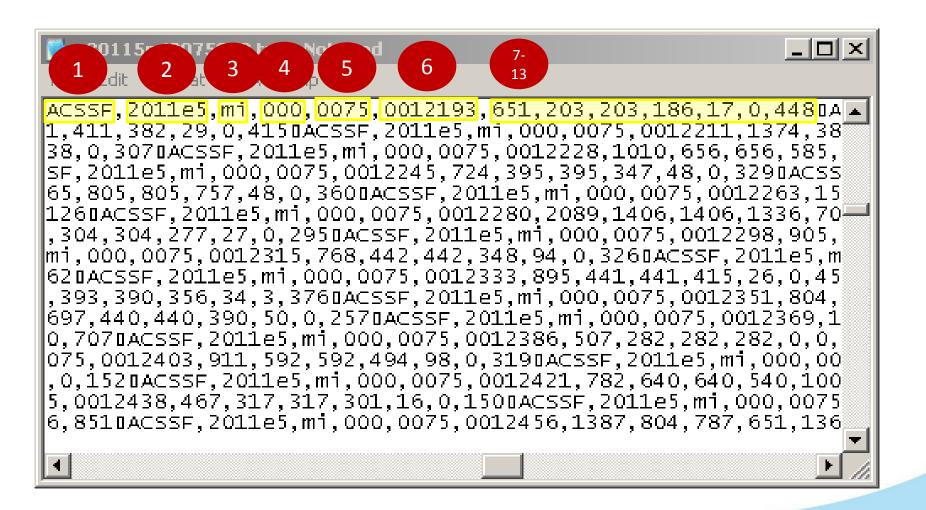
Margin of error file m20115mi0075000.txt

,15000US260010001001,"Block Group 1, Census Tract 1, Alcona County, Michigan",,, 15000US260010001002, "Block Group 2, Census Tract 1, Alcona County, Michigan",,, 15000US260019701001, "Block Group 1, Census Tract 9701, Alcona County, Michigan",,, 15000US260019701002, "Block Group 2, Census Tract 9701, Alcona County, Michigan",,, 15000US260019704001, "Block Group 1, Census Tract 9704, Alcona County, Michigan",,, 15000US260019704002, "Block Group 2, Census Tract 9704, Alcona County, Michigan",,, 15000US260019705001, "Block Group 1, Census Tract 9705, Alcona County, Michigan",,, 15000US260019705002, "Block Group 2, Census Tract 9705, Alcona County, Michigan",,, 15000US260019705003, "Block Group 3, Census Tract 9705, Alcona County, Michigan",,, 15000US260019706001, "Block Group 1, Census Tract 9706, Alcona County, Michigan" ... 15000US260019706002, "Block Group 2, Census Tract 9706, Alcona County, Michigan",,, 15000US260019900000, "Block Group O, Census Tract 9900, Alcona County, Michigan",,, 15000US260030001001, "Block Group 1, Census Tract 1, Alger County, Michigan",,, 15000US260030001002, "Block Group 2, Census Tract 1, Alger County, Michigan",,, 15000US260030001003, "Block Group 3, Census Tract 1, Alger County, Michigan",,, 15000US260030002001, "Block Group 1, Census Tract 2, Alger County, Michigan",,, ,15000US260030002002,"Block Group 2, Census Tract 2, Alger County, Michigan",,, 15000US260030003001, "Block Group 1, Census Tract 3, Alger County, Michigan",,, 15000US260030003002, "Block Group 2, Census Tract 3, Alger County, Michigan",,, 15000US260039900000, "Block Group O, Census Tract 9900, Alger County, Michigan",

Geography file g20115mi.csv or g20115mi.txt



Starting and Ending Position





Templates

	С	D	Е	F	G	Н	I	J	K	L	M	4
1	STUSAB	CHARITER	SEQUENCE	LOGRECNO	B23025_001	B23025_002	B23025_003	B23025_004	B23025_005	B23025_006	B23025_007	
						Population 16	*	force:%Civilian	years and over%In labor force:%Civilian	Population 16 years and over%In labor	Population 16 years and	
					Population 16	-	force:%Civilian		force:%Unempl	force:%Armed	over%Not in	
2	STUSAB	CHARITER	SEQUENCE	LOGRECNO	years and over	force:	labor force:	yed .	oyed	Forces	labor force	-
2815	mi	0	75	12192	2587	1261	1261	1140	121	(1326	
2816	mi	0	75	12193	651	203	203	186	17	0	448	
2817	mi	0	75	12194	1037	402	402	355	47	(635	
2818	mi	0	75	12195	955	415	415	371	44	0	540	
2819	mi	0	75	12196	1327	595	595	519	76	0	732	
2820	mi	0	75	12197	1136	520	520	459		0	616	
2821	mi	0	75	12198	1293	703	703	607	96	0	590	
		-								-		

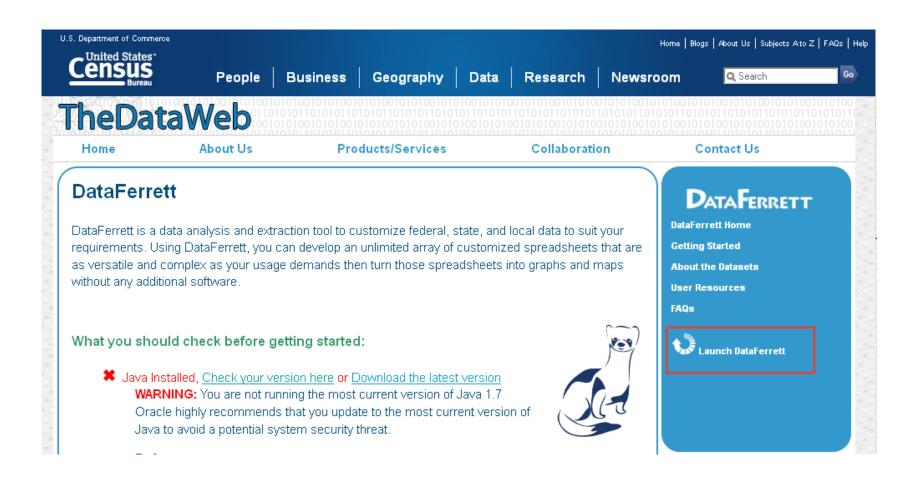
http://www2.census.gov/acs2011_5yr/summaryfile/UserTools/2011_Summary_ FileTemplates.zip



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 - Summary File Retrieval Tool
- Wrap up

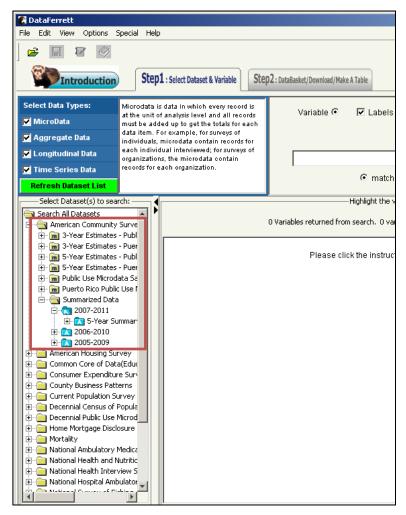
DataFerrett

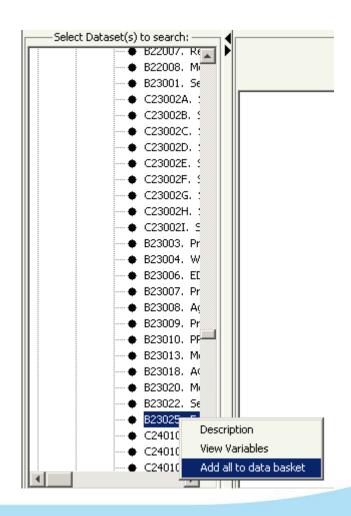


http://dataferrett.census.gov/



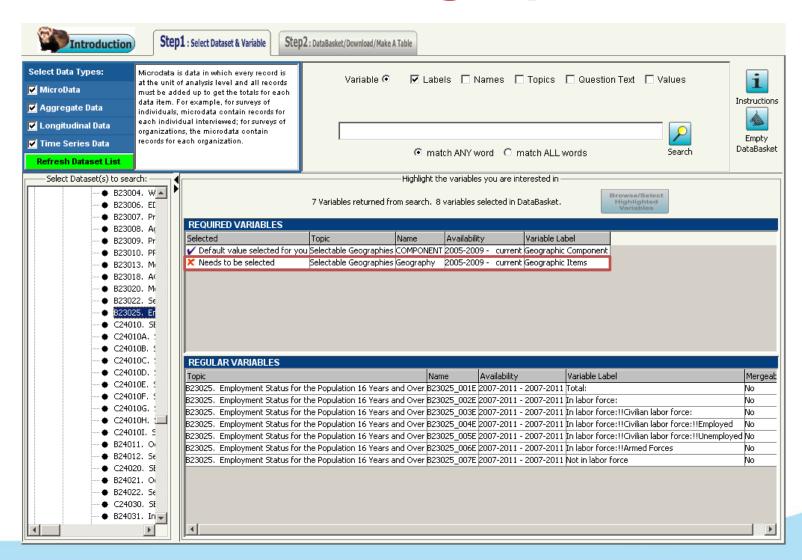
Finding Summary Data





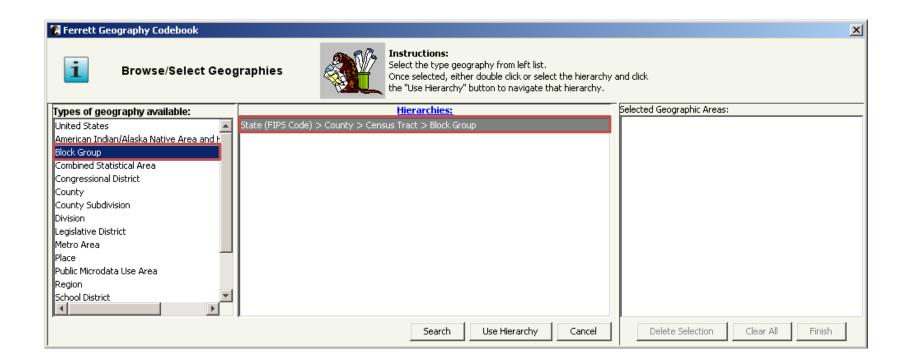


Select Geographies

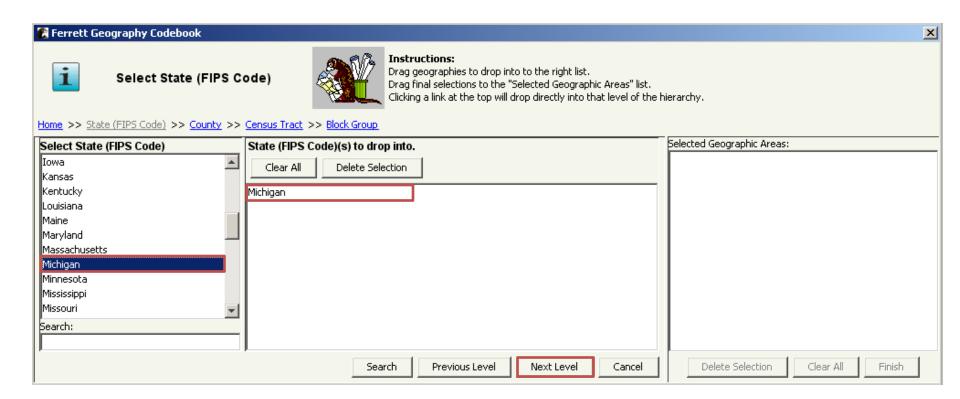




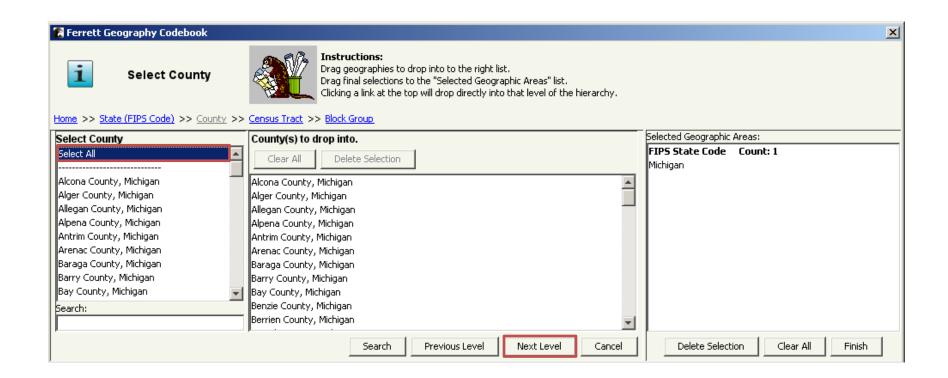
Select Geographies



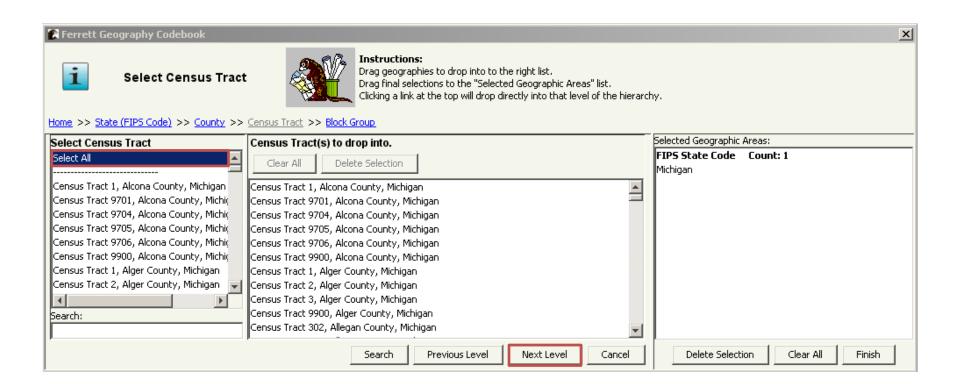
Next Level-State



Next Level-County



Next Level-Census Tract

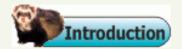




Next Level-Block Group



Step 2



Step1: Select Dataset & Variable

Step2: DataBasket/Download/Make A Table

Review your variables then go back to select more variables or go on to get data







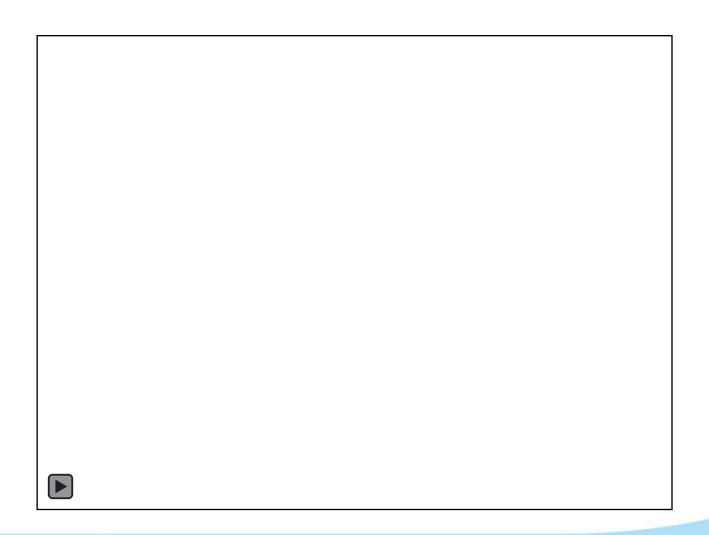


-Current Query Variables from ACS Summarized Data (5-Year Summary File): -

Name	Variable Label	Availability
B23025_001E	Total:	2007-2011 - 2007-2011
B23025_002E	In labor force:	2007-2011 - 2007-2011
B23025_003E	In labor force:!!Civilian labor force:	2007-2011 - 2007-2011
B23025_004E	In labor force:!!Civilian labor force:!!Employed	2007-2011 - 2007-2011
B23025_005E	In labor force:!!Civilian labor force:!!Unemployed	2007-2011 - 2007-2011
B23025_006E	In labor force:!!Armed Forces	2007-2011 - 2007-2011
B23025_007E	Not in labor force	2007-2011 - 2007-2011
COMPONENT	Geographic Component	2005-2009 - current
GEOG-101	Block Group	2007-2011 - 2007-2011

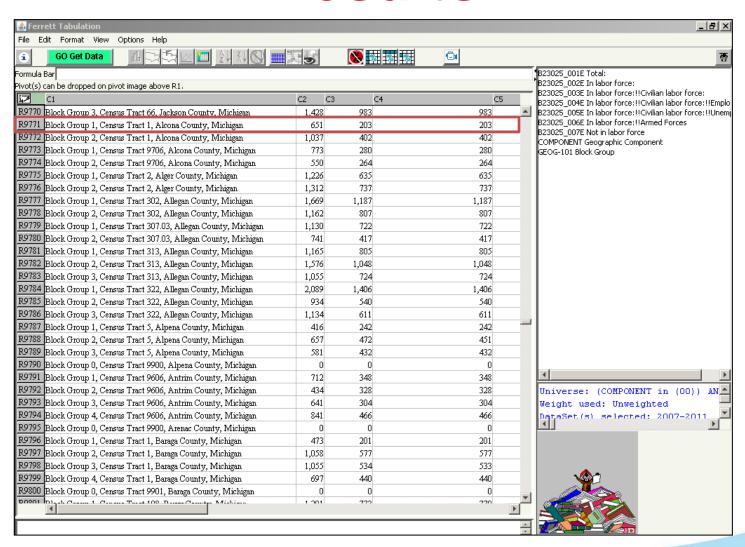


Make Table





Results





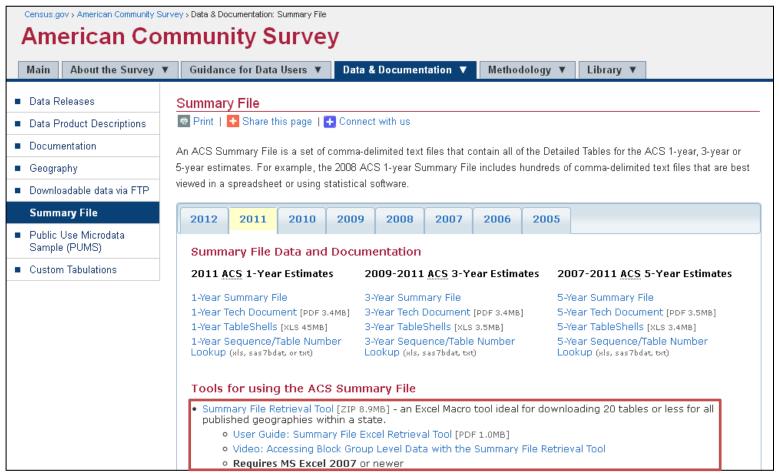
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Summary File Retrieval Tool

- Tool allows users to load tables from the ACS SF into an Excel spreadsheet
- Must have Excel 2007 or newer to run tool
- You can access all tracts and block groups per table per state
- Available at http://www.census.gov/acs/www/data_ documentation/summary_file/

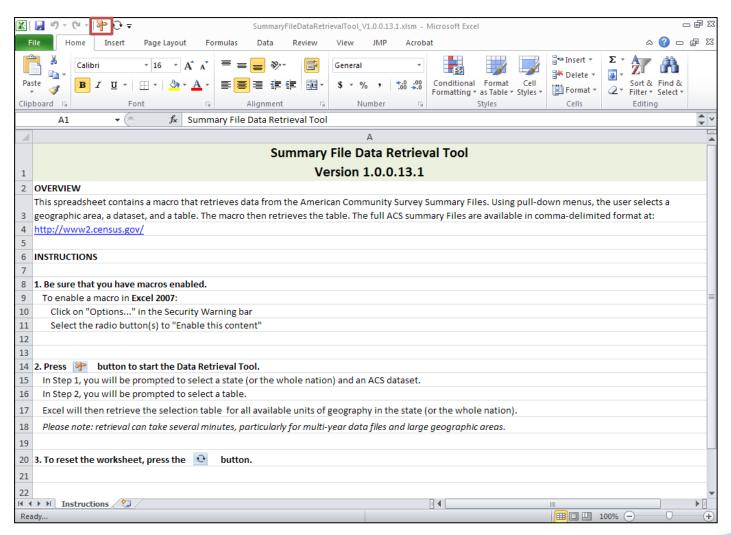
Summary File Page



http://www.census.gov/acs/www/data_documentation/summary_file/

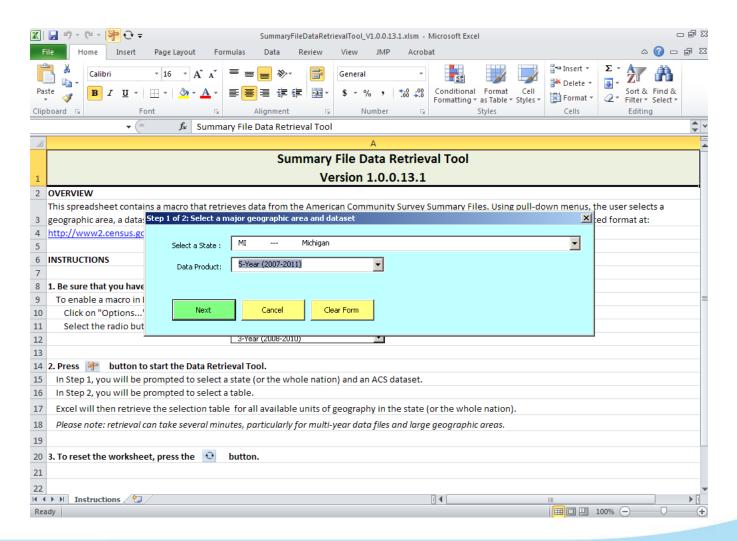


SF Retrieval Tool



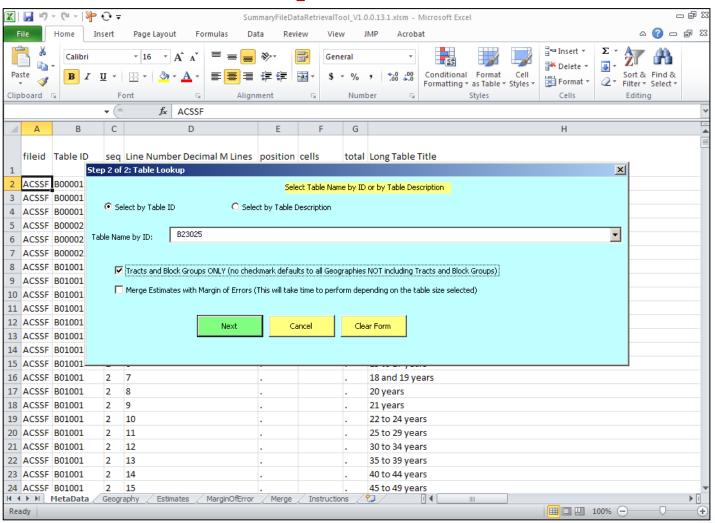


Step 1 of 2



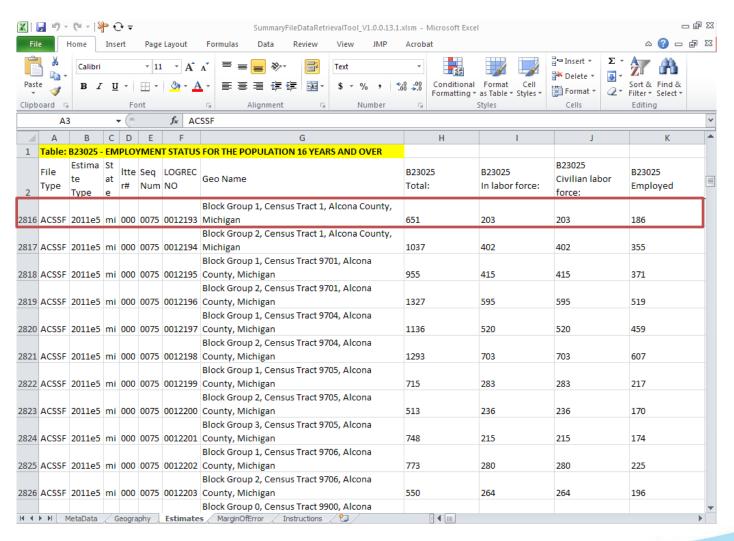


Step 2 of 2





Results-Estimates





Video on Using SF Retrieval Tool



http://www.youtube.com/user/uscensusbureau



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Recap

- Tracts and block groups are only available as 5-year estimates (not 1-year or 3-year)
- Block group level estimates are not available in American FactFinder; you must use the ACS Summary File
- You can access the ACS SF using the FTP site, DataFerrett, or SF Retrieval Tool

Block Groups in 3 Steps

1-Verify your table is available at the block group level (check Appendix E in SF Tech Doc)

2-Find your block group using TIGERweb

3-Use your tool of choice to find table(s)

Stay in Touch

- Join the ACS Data Users Group
 - http://www.acsdatausers.org/
- Get ACS email updates
 - https://public.govdelivery.com/accounts/USCE NSUS/subscriber/new?category_id=USCENS US_C12
- Submit questions
 - https://ask.census.gov/
- Contact the call center
 - -1-800-923-8282

Questions?

